

AMENDMENTS TO THE CLAIMS

1. (Original) An air supply conduit for delivering a stream of air to an internal combustion engine and a nitrous oxide and fuel injection assembly mounted to said air supply conduit,

said fuel injection assembly including:

a support member mounted inside the air supply conduit,

a connector extending from said support member to the outside of the air supply conduit,

a fastener mounted to said connector outside the air supply conduit and holding said support member to said air supply conduit,

at least one injector nozzle extending from outside the air supply conduit through said connector through said support member, and into the air supply conduit,

said injector nozzle including a fuel orifice and a nitrous oxide orifice for communication with the stream of air moving through the air supply conduit,

a fuel supply conduit and a nitrous oxide supply conduit in said injector nozzle in communication with said fuel orifice and said nitrous oxide orifice of its injector nozzle for injecting fuel and nitrous oxide into the stream of air moving through the air supply conduit,

said nitrous oxide conduit and said nitrous oxide orifice configured to feed liquid nitrous oxide to the air stream and to induce the nitrous oxide to evaporate in said air stream; and

22 a control valve for controlling the flow of fuel and nitrous oxide through
23 said conduits and said injector nozzle.

1 2. (Cancelled)

1 3. (Original) The invention of claim 1, wherein said support member is arcuate
2 and extends part way about said air supply conduit.

1 4. (Original) The invention of claim 1, wherein said air supply conduit is circular in
2 cross section and said support member is an arcuate support strap that extends part way
3 about the air supply conduit.

1 5. (Currently amended) An air supply conduit for delivering a stream of air to an
2 internal combustion engine and a nitrous oxide and fuel injection assembly mounted to
3 said air supply conduit,

4 said air supply conduit having an external wall defining an air passageway, and
5 openings defined in said external wall,

6 said fuel injection assembly including:

7 a support member mounted inside the air supply conduit against said
8 external wall at said openings,

9 a at least one connector extending from said support member through each
10 opening in said external wall to the outside of the air supply conduit,

11 a fastener mounted to ~~at least one of~~ said connectors outside the air supply
12 conduit and holding said support member against the external wall,
13 an injector nozzle extending from outside the air supply conduit through
14 each said connector and into the air supply conduit, and
15 each said injector nozzle including a fuel orifice and a nitrous oxide orifice
16 positioned inside the air supply conduit for supplying fuel and nitrous oxide to the
17 stream of air moving through the air supply conduit, and
18 a control valve comprising individual control for supplying fuel and
19 nitrous oxide at different times to each of said injector nozzles.

1 6. (Cancelled)

1 7. (Original) The invention of claim 5, wherein

2 said air supply conduit is circular in cross section and said support member is an
3 arcuate platform that extends part way about said air supply conduit.

1 8. (Cancelled)

1 9. (Original) The invention of claim 5, wherein

2 said support member is a support platform having a bearing surface engaging the
3 external wall of said air supply conduit.

1 10. (Currently amended) The invention of claim 5, wherein

2 said ~~at least one~~ connector comprises a cylindrical connector conduit extending
3 from said support member and having internal threads for receiving said nozzle and
4 external threads for receiving said fastener.

1 11. (Original) A nitrous oxide and fuel injection assembly for mounting to an air
2 supply conduit of an internal combustion engine, the air supply conduit having an
3 external wall defining an air passageway for passing air to the engine, for mixing fuel and
4 nitrous oxide with the air stream moving through the air supply conduit, said injection
5 assembly comprising:

6 a support member mounted inside the air supply conduit against said external wall
7 and extending partially about the inside of the air supply conduit,

8 a plurality of an injector nozzles extending from outside the air supply conduit and
9 into the air supply conduit, and mounted to said support member,

10 said injector nozzles each including a fuel orifice and a nitrous oxide orifice
11 positioned inside the air supply conduit for supplying fuel and nitrous oxide to the
12 stream of air moving through the air supply conduit.

1 12. (Original) The nitrous oxide and fuel injector assembly of claim 11, and further
2 including:

3 a connector conduit extending from said support member through the external
4 wall of said air supply conduit,

5 a fastener fastening said support member to the external wall of the air supply
6 conduit, and
7 said nozzle extending through said connector conduit.

1 13. (Currently amended) The nitrous oxide and fuel injector assembly of claim 11,
2 wherein

3 said support member has a bearing surface shaped to conform to the shape of the
4 facing surface of the inside of said external wall of said air supply conduit, with ~~said~~
5 ~~mounting boss and said~~ a fastener positioned outside said air supply conduit holding
6 said bearing surface against the facing surface of the inside of the external wall.

1 14 - 15. (Canceled)

1 16. (Original) A method of mounting an injector nozzle on an air supply conduit
2 extending toward an internal combustion engine, comprising:
3 forming a hole in the external wall of the air supply conduit,
4 placing a support platform inside the air supply conduit,
5 extending a connector conduit protruding from the support platform from inside
6 the external wall through the hole to the outside of the external wall, and
7 mounting a nozzle through the connector conduit.

1 17. (Original) The method of claim 16, and further including:
2 attaching a fastener about said connector conduit outside the external wall of the
3 air supply conduit for holding the support platform to the external wall.

1 18. (Original) The method of claim 16, wherein
2 the step of forming a hole in the external wall of the air conduit comprises
3 forming a plurality of holes in the external wall, and
4 the step of extending a connector conduit protruding from the support platform
5 through the hole comprises extending a connector conduit from the support platform
6 through each hole.

1 19. (New) An air supply conduit for delivering a stream of air to an internal
2 combustion engine and a nitrous oxide and fuel injection assembly mounted to said air
3 supply conduit,
4 said air supply conduit having a side wall and an opening through said side wall,
5 said fuel injection assembly including:
6 a support member mounted inside the air supply conduit at said opening,
7 a connector extending from said support member through said opening to
8 the outside of the air supply conduit,
9 a fastener mounted to said connector outside the air supply conduit and
10 bearing against said air supply conduit and holding said support member to said
11 air supply conduit,

12 an injector nozzle extending from outside the air supply conduit through
13 said connector, through the hole of said air supply conduit, through said support
14 member, and into the air supply conduit,

15 said injector nozzle including a fuel orifice and a nitrous oxide orifice for
16 communication with the stream of air moving through the air supply conduit,

17 a fuel supply conduit and a nitrous oxide supply conduit in said injector
18 nozzle in communication with said fuel orifice and said nitrous oxide orifice of its
19 injector nozzle for injecting fuel and nitrous oxide into the stream of air moving
20 through the air supply conduit,

21 said nitrous oxide conduit and said nitrous oxide orifice configured to feed
22 liquid nitrous oxide to the air stream and to induce the nitrous oxide to evaporate
23 in said air stream; and

24 a control valve for controlling the flow of fuel and nitrous oxide through
25 said conduits and said injector nozzle.